

National Library  
of Medicine

PubMed

PubMed	Nucleotide	Protein	Genome	Structure	PopSet	Taxonomy	OMIM
Search PubMed	▼ for peptide immunotherapy and japanese cedar					Go	Clear
Limits Preview/Index History Clipboard							

Entrez PubMed

Display	Summary	▼	Save	Text	Order	Details	Add to Clipboard
Show: 20	▼	Items 1-3 of 3					One page

PubMed  
Services

- ☐ 1: [Toda M, Sato H, Takebe Y, Taniguchi Y, Saito S, Inouye S, Takemori T, Sakaguchi M.](#) Related Articles

Inhibition of immunoglobulin E response to Japanese cedar pollen allergen (Cry j 1) in mice by DNA immunization: different outcomes dependent on the plasmid DNA inoculation method.  
Immunology. 2000 Feb;99(2):179-86.  
PMID: 10692034

Related  
Resources

- ☐ 2: [Hirahara K, Saito S, Serizawa N, Sasaki R, Sakaguchi M, Inouye S, Taniguchi Y, Kaminogawa S, Shiraishi A.](#) Related Articles

Oral administration of a dominant T-cell determinant peptide inhibits allergen-specific TH1 and TH2 cell responses in Cry j 2-primed mice.  
J Allergy Clin Immunol. 1998 Dec;102(6 Pt 1):961-7.  
PMID: 9847437

- ☐ 3: [Nagai H, Kondo M, Koda A, Nakamura S, Hashimoto M, Yanagihara Y, Daikoku M.](#) Related Articles

Responses of isolated Japanese monkey tracheal muscle to allergic mediators.  
Int Arch Allergy Immunol. 1992;98(1):70-5.  
PMID: 1378043

[Write to the Help Desk](#)  
[NCBI](#) | [NLM](#) | [NIH](#)  
[Department of Health & Human Services](#)  
[Freedom of Information Act](#) | [Disclaimer](#)

National Library  
of Medicine

PubMed

PubMed	Nucleotide	Protein	Genome	Structure	PopSet	Taxonomy	OMIM	
Search PubMed	▼ for						Go	Clear
Limits Preview/Index History Clipboard								

Entrez PubMed

Display	Summary	▼	Save	Text	Order	Add to Clipboard
Show 20	▼	Items 1-20 of 200	Page 1 of 10		Select page 1 2 3 4 5 6 7 8 9 10	

PubMed  
Services

- ☐
- 1:
- [Hashiguchi S, Sugimura K.](#)

Related Articles

[Molecular immunology of Japanese cedar pollen allergens: analysis of T cell epitopes].

Nippon Rinsho. 1996 Aug;54(8):2233-42. Review. Japanese.  
PMID: 8810803

- ☐
- 2:
- [Sone T, Morikubo K, Miyahara M, Komiyama N, Shimizu K, Tsunoo H, Kino K.](#)
- Related Articles

T cell epitopes in Japanese cedar (*Cryptomeria japonica*) pollen allergens: choice of major T cell epitopes in Cry j 1 and Cry j 2 toward design of the peptide-based immunotherapeutics for the management of Japanese cedar pollinosis.

J Immunol. 1998 Jul 1;161(1):448-57.  
PMID: 9647255

Related  
Resources

- ☐
- 3:
- [Mizumoto K, Kimura S, Abe Y, Uehara M, Katagiri M.](#)

Related Articles

[Analysis of T cell epitopes on birch pollen allergen].

Hokkaido Igaku Zasshi. 1997 Jan;72(1):59-67. Japanese.  
PMID: 9086363

- ☐
- 4:
- [Hori T, Kamikavaji N, Kimura A, Sone T, Komiyama N, Komiyama S, Sasazuki T.](#)
- Related Articles

Japanese cedar pollinosis and HLA-DP5.

Tissue Antigens. 1996 Jun;47(6):485-91.  
PMID: 8813737

- ☐
- 5:
- [Sakaguchi M.](#)

Related Articles

[Japanese cedar pollen allergen standardization: analysis of major allergens].

Arerugi. 1998 Dec;47(12):1233-6. Review. Japanese. No abstract available.  
PMID: 10028715

- ☐
- 6:
- [Marsh DG, Zwollo P, Huang SK, Ghosh B, Ansari AA.](#)

Related Articles

Molecular studies of human response to allergens.

Cold Spring Harb Symp Quant Biol. 1989;54 Pt 1:459-70. No abstract available.  
PMID: 2639765

- ☐
- 7:
- [Ito Y.](#)

Related Articles

[Study of IgG antibody in Japanese cedar pollinosis patients. I. Measurement of IgG antibody to Japanese cedar pollen antigens by radioimmunoassay].

Arerugi. 1982 Dec;31(12):1231-8. Japanese. No abstract available.  
PMID: 7171318

National Library  
of Medicine

PubMed

PubMed	Nucleotide	Protein	Genome	Structure	PopSet	Taxonomy	OMIM	
Search PubMed	▼	for					Go	Clear
Limits Preview/Index History Clipboard								

Entrez PubMed

☐ 1: *Nippon Rinsho*. 1996 Aug;54(8):2233-42[Related Articles, Books, LinkOut](#)PubMed  
Services**[Molecular immunology of Japanese cedar pollen allergens:  
analysis of T cell epitopes].**

[Article in Japanese]

**Hashiguchi S, Sugimura K**

Department of Molecular Biology, Faculty of Engineering, Kagoshima University.

Related  
Resources

Recent studies demonstrated that partial alteration of the amino acid sequence of T cell epitopes induced a stimulatory signal that was qualitatively different. Therefore, it is conceivable that immunotherapy using peptides representing dominant T cell epitopes could modulate the T cell response of allergic patients and prevent the production of IgE antibodies. Accordingly, a number of allergens have been molecularly cloned to determine their amino acid sequences. In Japan, the number of patients suffering from Japanese cedar pollinosis is steadily increasing and it has become a serious social problem. In this paper, we review the recent advances on T cell epitope mapping of Japanese cedar pollen, Cry j 1 and Cry j 2 and immunomodulating trials based on the mechanisms of T cell antigen-recognition.

Publication Types:

- Review
- Review, tutorial

PMID: 8810803

Display	Abstract	▼	Save	Text	Order	Add to Clipboard
---------	----------	---	------	------	-------	------------------

[Write to the Help Desk](#)  
[NCBI](#) | [NLM](#) | [NIH](#)  
[Department of Health & Human Services](#)  
[Freedom of Information Act](#) | [Disclaimer](#)

National Library  
of Medicine

PubMed

PubMed	Nucleotide	Protein	Genome	Structure	PopSet	Taxonomy	OMIM
Search PubMed	▼ for					Go	Clear
Limits Preview/Index History Clipboard							

Entrez PubMed

☐ 1: *Tissue Antigens* 1996 Jun;47(6):485-91[Related Articles, Books, LinkOut](#)

## Japanese cedar pollinosis and HLA-DP5.

PubMed  
Services

Hori T, Kamikawaji N, Kimura A, Sone T, Komiyama N, Komiyama S,  
Sasazuki T

Department of Genetics, Medical Institute of Bioregulation, Kyushu University,  
Fukuoka, Japan.

Related  
Resources

Japanese cedar pollinosis is a type I allergic disease caused by Japanese cedar (*Cryptomeria japonica*) pollen. We investigated the association between the disease and HLA class II alleles by HLA-DNA typing using a PCR-SSOP method and found that the frequency of HLA-DP5 (DPA1\*02022 and DPB1\*0501) was significantly increased in the patients. To investigate whether the HLA-DP5 molecule is directly involved in the pathogenesis of the disease, Japanese cedar pollen antigen (CPAg)-specific T cell lines were established from 3 patients who possessed HLA-DP5 (DPA1\*02022/DPB1\*0501). By using these CPAg-specific T cell lines and HLA class II-expressing L-cell transfectants, we found that disease-associated HLA-DP5 restricted T cells specific for CPAg existed in the patients. Furthermore, among 38 synthesized overlapping peptides spanning the entire length of one of the major Japanese cedar pollen allergens, Cry j 1, an immunodominant peptide which induced HLA-DP5 restricted Th2 was identified. These observations suggest that the HLA-DP5 may be involved, at least in part, in the pathogenesis, by helping the IgE antibody production against CPAg.

PMID: 8813737

Display	Abstract	▼	Save	Text	Order	Add to Clipboard
---------	----------	---	------	------	-------	------------------

[Write to the Help Desk](#)[NCBI](#) | [NLM](#) | [NIH](#)[Department of Health & Human Services](#)[Freedom of Information Act](#) | [Disclaimer](#)

National Library  
of Medicine

PubMed

PubMed	Nucleotide	Protein	Genome	Structure	PopSet	Taxonomy	OMIM
Search PubMed	▼ for					Go	Clear
Limits Preview/Index History Clipboard							

Display	Abstract	▼	Save	Text	Order	Add to Clipboard
---------	----------	---	------	------	-------	------------------

Entrez PubMed

☐ 1: *Allergy* 1996 Oct;51(10):732-40[Related Articles, Books, LinkOut](#)PubMed  
Services

## Th1/Th2 response profiles to the major allergens Cry j 1 and Cry j 2 of Japanese cedar pollen.

Sugimura K, Hashiguchi S, Takahashi Y, Hino K, Taniguchi Y, Kurimoto M, Fukuda K, Ohyama M, Yamada G

Department of Molecular Biology, Faculty of Engineering, Kagoshima University, Japan.

Related  
Resources

Cry j 1 and Cry j 2 are known to be the major allergens of Japanese cedar pollen. A comparative study was carried out on the immune responses to stimulation with Cry j 1 and Cry j 2 in 24 symptomatic patients and six nonallergic subjects. In T-cell proliferation assays, mean stimulation indexes (SI) were 10.6 for Cry j 1 and 11.7 for Cry j 2 stimulation, respectively, in the allergic patients. Two of the nonallergic subjects showed strong T-cell proliferation to both allergens, while the remainder did not. All the allergic subjects (17/17) showed high titers of anti-Cry j 1 IgE antibody at a mean value of 165 U/ml, whereas only 64% responded to Cry j 2 with low titers at a mean value of 26 U/ml. Nonallergic subjects did not respond with IgE production. Allergic subjects were further examined for their cytokine production profiles. All allergic subjects tested (16/16) produced high levels of interferon-gamma (IFN-gamma) in response to Cry j 1 with a mean value of 918 pg/ml, while only five subjects showed significant elevation of IFN-gamma production in response to Cry j 2 with a mean value of 679 pg/ml. The remainder produced small amounts of IFN-gamma. Cry j 1 induced higher levels of interleukin (IL)-10 gene expression than did Cry j 2 stimulation, while both allergens induced IL-4 expression at a similar level. The IL-12 p35 gene was constitutively expressed, whereas the IL-12 p40 gene expression in Cry j 1-stimulated cells was elevated eightfold over that of nonstimulated cells. Increased expression of the IL-12 p40 gene was negligible in Cry j 2-stimulated cells. Thus, Cry j 1 stimulated mixed features of Th1 and Th2-like responses, while Cry j 2 played a minor role in inducing IgE production and cytokine (IFN-gamma, IL-10, and IL-12) production, except for IL-2 production and strong T-cell proliferative activity. Therefore, it was concluded that Cry j 1 is the more important allergen, and that T-cell proliferation assays do not necessarily reflect the level of allergenicity.

PMID: 8905002